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# DO PARENTS LIVE IT UP WHEN CHILDREN FLY THE COOP?

BY NORMA B. COE, ZHENYA KARAMCHEVA, AND ANTHONY WEBB\*

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## Introduction

With the virtual disappearance of traditional pensions, declining Social Security replacement rates, and longer life spans, the retirement landscape is shifting dramatically. Today, responsibility for a comfortable retirement rests mostly on the individual. This change has led to widespread concern about the adequacy of households' retirement savings.

Experts disagree on whether Americans are adequately prepared for retirement. A Center for Retirement Research (CRR) study conducted before the financial crisis estimated that 43 percent of households are 'at risk' of being unable to maintain their pre-retirement standard of living in retirement.<sup>1</sup> In contrast, another well-publicized study that compares optimal savings with that reported in the *Health and Retirement Study* (HRS) concluded that less than 4 percent of Americans are behind in their retirement saving.<sup>2</sup>

The difference in the estimated number of individuals under-saving for retirement depends crucially on the assumption of what parents do with the money that is freed up when their children leave home. The CRR study assumes that households maintain relatively constant consumption over time, which implies that parents increase their consumption when their children become financially independent. In

contrast, the optimal savings literature assumes that parents save the additional amount. Parents benefit from this strategy in two ways. First, they are able to quickly build up retirement savings. Second, they keep their per-person consumption low and thus need less money to fund consumption in retirement. The question remains: which assumption matches what parents actually do?

This *brief* presents the findings of a new study that investigates how, in fact, households behave. It shows that parents maintain household-level and increase per-capita consumption when their children leave home. These findings challenge the idea that parents will automatically save more for retirement when their children are independent, indicating that more households are at risk of an unsatisfactory retirement.

This *brief* is organized as follows. The first section explains a prominent theoretical model of household savings behavior. The second section describes the data and methodology, while the third section reports the findings. The final section concludes that many households are at risk of falling short of maintaining even the consumption level they had while raising their children, let alone the higher level they have enjoyed since their children flew the coop.

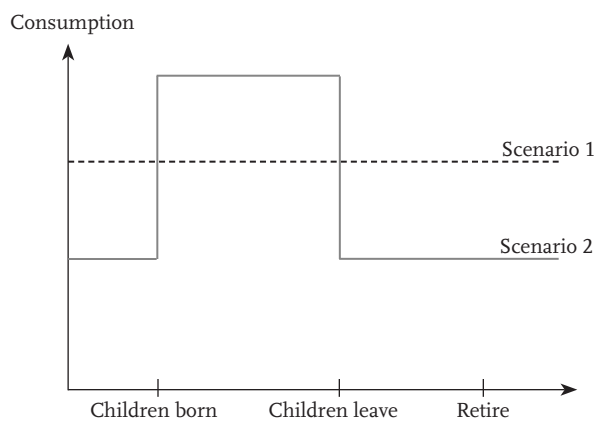
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\* The authors are all with the Center for Retirement Research at Boston College. Norma B. Coe is associate director of research, Zhenya Karamcheva is a research associate, and Anthony Webb is a research economist. This *brief* is related to broader analysis from Coe and Webb (2010).

## Theoretical Models of Household Savings Behavior

According to the life-cycle model of savings behavior, households should time their savings in order to smooth consumption over their lifetime.<sup>3</sup> Households might aim to enjoy approximately the same level of consumption in all periods, both before and after retirement. This objective would imply that households would save more when income is high and less when income is low. This pattern is illustrated in Figure 1 as Scenario 1, and can be thought of as the household-consumption smoothing assumption.

FIGURE 1. POTENTIAL HOUSEHOLD CONSUMPTION PATTERNS



Source: Authors' illustration.

But households' needs vary over the life cycle, and may be particularly high when children are at home. Food, clothing, and karate classes all cost money, and so households might optimally plan to spend more during this period. Once the children leave, parents would reduce total household consumption, but maintain the same level of per-capita consumption. This behavior would lead to higher saving, and the total amount of retirement savings needed would be relatively low because the household aims to replace the lower consumption enjoyed after the kids left home, not the higher level enjoyed previously. This pattern is illustrated in Figure 1 as Scenario 2, and can be thought of as the per-capita-consumption smoothing assumption.

These two assumptions have very different implications for the optimal timing and amount of retirement savings. A household that plans for a constant level of consumption (Scenario 1) has a high target level of retirement saving, and will not dramatically reduce household spending when the children leave home. However, if the household plans on spending more when the children are home (Scenario 2), it should noticeably decrease consumption and increase retirement savings when the children leave the nest. We test which of these patterns best fits the consumption data.

## Data and Methodology

This study uses data from the *Health and Retirement Study* (HRS), a nationally representative survey of older Americans. In addition, we match the survey data to the restricted Social Security Administration (SSA) Administrative Summary Earnings data. Starting in 2001, a random sample of 5,000 households was selected to participate in the *Consumption and Activities Mail Survey* (CAMS), which asks households to report the amounts they spent on various categories of consumption.<sup>4</sup> The CAMS has been administered biannually from 2001 to 2007, which allows us to track households born before 1947 and directly measure any consumption changes after children leave the household. Ideally, we would examine the spending patterns for younger households, at ages when the majority of people experience their children leaving home, but panel consumption data do not exist. However, the older households that comprise our sample are the ones for whom retirement savings are especially salient at the time when their children leave home. We divide respondents into three categories:

- those who either never had children or whose children moved out prior to 2001;
- those who had resident children throughout the period 2001 to 2007; and
- those whose children moved out between 2001 and 2007.

The first two categories are the control groups, since the household composition remains constant during the time period.<sup>5</sup> The third category contains the households of interest. If the household-consumption smoothing assumption holds, then the

change in *total* household consumption should be similar among all three groups, but the growth in *per-capita* consumption would be significantly higher for the third group after children leave. If the per-capita-consumption smoothing assumption holds, then the growth rate of *total* household consumption of the third group should be lower than that of the first two groups, while the growth in *per-capita* consumption of all three groups would be the same.

## Results

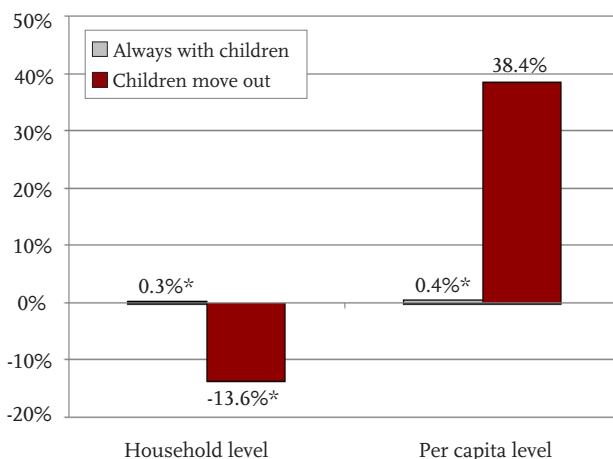
To test the alternative theories, the analysis examines two separate types of consumption: housing and non-durable goods.

### Housing

We start with the illustrative example of housing. Housing expenses include insurance, real estate taxes, maintenance, and standard expenses such as mortgage or rent, electricity, water, heat, and phone. Spending on housing is basically fixed, since the costs associated with owning the family home vary little with the number of bedrooms that are actually being used. This fact would suggest that, as long as families do not move, the three household types should exhibit similar rates of growth of household-level spending.<sup>6</sup> But per-person spending of households whose kids move out should increase simply because the fixed expenses are shared among fewer individuals.

Figure 2 shows the percentage change in household-level and per-capita spending on housing by households that always had children or whose children left home, relative to a base case of households without resident children. The analysis includes controls for marital status, educational attainment, age and age squared, retirement status, any change in retirement status, total number of children, race, and lifetime income.<sup>7</sup> We find exactly what we predicted: at the household level, there is no significant difference in the growth of total housing expenditures among the three household types. But we find a 38-percent increase in per-capita housing expenditures for households whose children leave relative to those who never have children, simply because there are fewer people to share the fixed costs.

FIGURE 2. REGRESSION-ADJUSTED CHANGE IN HOUSING CONSUMPTION RELATIVE TO HOUSEHOLDS WITHOUT CHILDREN



\* Not statistically significant.

Note: The growth rates in this figure represent changes between 2001-2005, 2003-2007, or both periods.

Source: Authors' calculations using University of Michigan, *Health and Retirement Study, Consumption and Activities Mail Survey*, linked to SSA Administrative data (HRS-CAMS-SSA) 2001-2007.

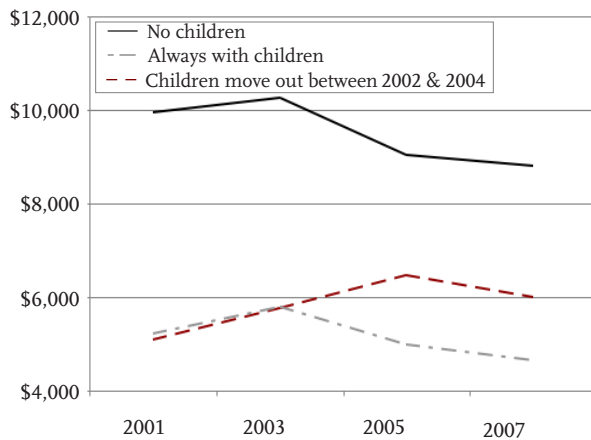
### Non-durable Consumption

Non-durable consumption includes purchases of housekeeping supplies, personal care products, apparel, leisure and hobby items, vacations, vehicle insurance, food purchases (including dining out), and gasoline. These types of consumption involve fewer economies of scale and are therefore potentially the most responsive to changes in household size. Thus, this category of spending allows us to test whether households are smoothing total household or per-capita consumption.

Figure 3 (on the next page) shows per-capita non-durable consumption over time, by household type. This figure shows that, between 2001 and 2007, households without children living at home were spending an average of \$8,800 to \$10,300 per person a year on non-durable goods. Note that their consumption was much higher than that of households with children still present, who spent only \$4,700 to \$5,800 per person. The cross-section pattern is the first indication that per-capita consumption may increase after children leave. The consumption of

both of these types of households declined during this period. Households whose children left between 2002 and 2004, however, showed a marked increase in per-person non-durable consumption. In 2001, they consumed \$5,100 per person, which is very similar to the amount spent by other households with children. By 2007, after their children have left, these households spent \$6,500 per person, almost \$2,000 more than the average per person spending of those who have children. This descriptive analysis supports the assumption of household-level consumption smoothing, and provides evidence that households increase per-capita consumption when children fly the coop.

FIGURE 3. PER-CAPITA NON-DURABLE EXPENDITURES, BY HOUSEHOLD TYPE, 2001-2007

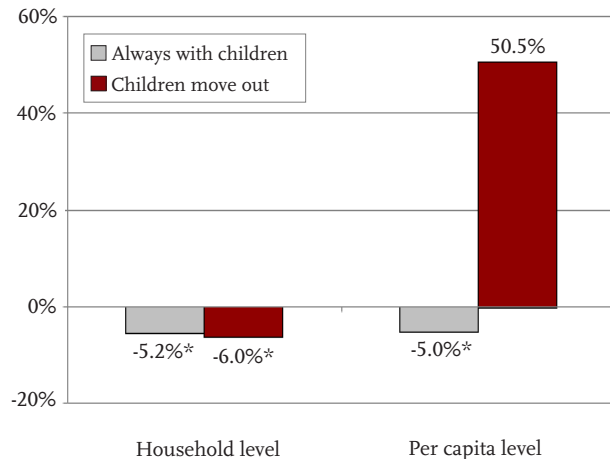


Source: Authors' calculations using 2001-2007 HRS-CAMS-SSA.

Figure 4 presents the change in household-level and per-capita non-durable consumption for households who always had kids or whose children left home, relative to the base case of households who never had resident kids.<sup>8</sup> Although there are small differences in changes in household level spending on non-durables, they fall far short of statistical significance.

However, we do see a dramatic increase in the per-capita, non-durable spending of households whose children move out. We estimate that households whose children leave increase their per-capita, non-durable consumption by 51 percent relative to

FIGURE 4. REGRESSION-ADJUSTED CHANGE IN NON-DURABLE CONSUMPTION RELATIVE TO HOUSEHOLDS WITHOUT CHILDREN



\* Not statistically significant.

Note: The growth rates in this figure represent changes between 2001-2005, 2003-2007, or both periods.

Source: Authors' calculations using 2001-2007 HRS-CAMS-SSA.

households who never have children. This trend is very different from households who had resident kids throughout, whose per-capita consumption decreases by a statistically insignificant 5 percent relative to that of households with no children. Together, these findings suggest that when children move out of the house, parents maintain the same level of household consumption, but increase per-capita consumption.

## Conclusion

Households face a choice when their children leave home. They can save more for retirement or increase per-capita consumption. The above research shows that households choose the latter, increasing per-capita, non-durable consumption by 51 percent on average. As a result, many are at risk of entering retirement with insufficient wealth to maintain the level of consumption they enjoyed while the children were in the house, let alone the increased consumption they enjoyed after the children left home.

## Endnotes

- 1 Munnell, Webb, and Golub-Sass (2007). After the crisis, this figure rose to 51 percent (Munnell, Webb, and Golub-Sass, 2009).
- 2 Scholz and Seshadri (2008).
- 3 The life-cycle model actually predicts that one would smooth marginal utility over time. If one's utility function is based only on consumption and is stable over the lifetime, two common assumptions in the economics literature, then smoothing marginal utility is equivalent to smoothing consumption.
- 4 All consumption and income data are normalized to 2007 dollars.
- 5 In order to eliminate confounding household composition issues such as divorce or death, we include only intact and stable households (either continually single or married) in the analysis. Thus, there are a constant number of adults in the household, with no adults moving in or out during the survey period.
- 6 We can identify households that move in the HRS survey data. The results are robust to their exclusion in the estimation. See Coe and Webb (2010) for more details.
- 7 We control for age, age squared, and educational attainment of both the husband and wife if the household is married. In order to compute a proxy for lifetime income, we take the top 20 years of earnings until age 50 from the SSA administrative records, index the earnings by wage growth to 2007, and then divide by the number of months. If two members of the household are working, we combine the top 20 years of earnings for both members of the household.
- 8 These regressions control for the same covariates as Figure 2.

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The Center for Retirement Research at Boston College was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research and forge a strong link between the academic community and decision makers in the public and private sectors around an issue of critical importance to the nation's future.

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